3.3 12 Mile Crossing Trail Upgrades

USAG-AK has proposed road upgrades located within lands on Fort Wainwright, Alaska. The proposed road upgrades are along 12 Mile Crossing Trail, located approximately 7-10km south of Delta Junction, and 1km west of the Richardson Highway in the DTA (Figure 80).

The Ober Creek Low Water Crossing project is located in the Ober Training Area along what is known as 12 Mile Crossing Trail in the DTA. This project will re-shape and install a rip rap blanket along both banks of the Ober Creek crossing. This project will also grade and improve 1.8km of the 12 Mile Crossing Trail from the base of the hill east to Jarvis Creek. The Ober Creek Low Water Crossing is 1.3km from the base of the hill on the western end and 0.5km from Jarvis Creek on the eastern end of the Trail. 12 Mile Crossing Trail is a key access point for Training Areas 19 and 20 and is the southern entrance and exit point for 33 Mile Loop Trail, which is the main access to Training Areas 5-11. The current low water crossing is unimproved and has erosion features associated with the banks. The existing trail width ranges from 6-10m, with the final graded base width to be 9.7m wide. This project will encompass approximately 3.8 acres, 95 percent of which has already been disturbed by construction of the trail and by fuel break clearings along either side of the trail.

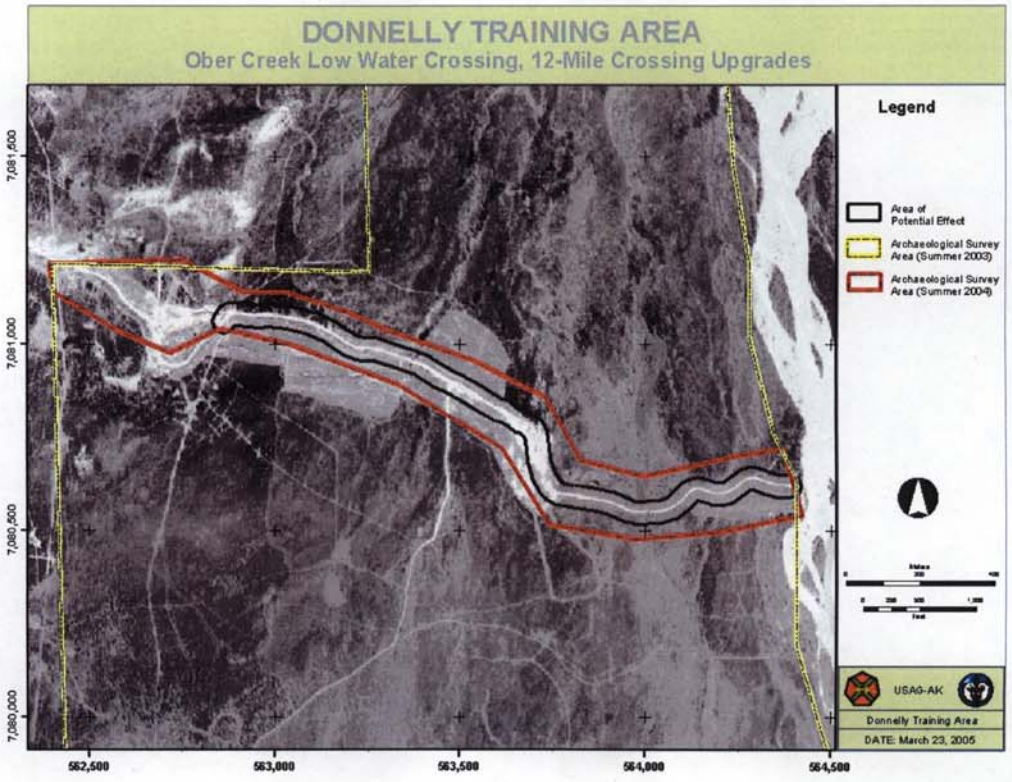

Figure 80. Location of the APE for the 12 Mile Crossing Trail upgrades

Survey and Field Methods

In the summers of 2003 and 2004, two archaeological survey crews (each comprised of four archaeologists) employed by CEMML conducted a pedestrian survey in the area of the proposed road upgrades along 12 Mile Crossing Trail project in the DTA. The project's APE encompassed an area larger than the anticipated construction footprint in order to ensure coverage of areas that may incur secondary impacts during construction or use. Parallel pedestrian transects spaced at approximately 20m intervals were walked systematically across the APE and surrounding area. Transect survey units were partitioned according to existing roads and trails where possible. When existing roads did not provide for practical unit boundaries, a one square kilometer work unit was defined. Systematic subsurface shovel testing was undertaken in areas considered to have high probability for containing archaeological sites. Areas that were shovel tested included but were not limited to: landforms affording a view of surrounding terrain; lake margins; ridgelines; terrace edges; hilltops; benches adjacent to steeper slopes; and bluffs. Shovel tests were typically 30cm in diameter and excavated into glacial till or consolidated outwash. All soil removed was screened through ¼in. hardware cloth. One archaeological site was observed inside the APE.

Cultural Resources

Three prehistoric sites (XMH-00282, XMH-01171 and XMH-01172) have been previously recorded within 1km of the proposed project area (Figure 80). The following is a description of each recorded site near the currently proposed project area.

XMH-00282

Latitude:
Longitude:
Determination: Not evaluated

Site XMH-00282 is located on a small barren knoll, with trails that go all around it. The site is approximately of the Richardson Highway. The site was identified in 1978 and consists of five flakes of three material types (Holmes 1979). This site was revisited in 2004 for this project and no new artifacts were located. The location on the AHRS card is off by several hundred meters. The correct UTM coordinates for the site are: .

Recommendations

Site XMH-00282 has been classified as a small lithic scatter. This site lies outside the APE for this proposed project and was not evaluated to determine eligibility for inclusion in the National Register of Historic Places. If the APE is moved by later design alteration, or if further projects are proposed in the area, the site should be evaluated to determine eligibility.

XMH-01171

Latitude:
Longitude:
Determination: Eligible

Site XMH-01171 is located on the southern edge of a terrace overlooking the . The nearest water source is located 1.5km to the east-

southeast. The view shed at the site is 180°. The Granite Mountains are visible to the southeast and Muskeg Hill can be seen to the east. Surface visibility at the site is 75 percent. UTM coordinates for the site are:

Figure 81. General view of site XMH-01171, facing south

Site XMH-01171 consists mainly of lithic debitage. More than 250 flakes were found on the surface and an additional 33 flakes were found subsurface in either shovel tests or test units. Chert, basalt, rhyolite, quartzite and obsidian (a non-locally occurring material type) were present among the debitage. Seventeen tools were found at the site. In addition to these artifacts, more than 100 of the over 250 flakes found at the site are of brown and clear glass. Whether this glass is from the contact or historic period is presently unknown. A clear glass scraper was also found at the site.

A total of 121 shovel test pits were excavated at the site. A 10m shovel test grid was established, although some shovel tests were excavated at 5m intervals on the northern portion of the site. Five meter interval tests were excavated here because more soil was present and the likelihood of encountering subsurface artifacts was considered to be greater. All shovel tests were excavated to glacial till. A total of eight shovel tests were positive, six of which contained just one flake each. The other two shovel tests contained two flakes each. Subsurface artifacts were found from 1-40cmbs in all positive shovel tests.

One 1m x 1m test unit was excavated at site XMH-01171. The unit was placed just inside the tree line to the north-northeast of the site datum, in between two positive shovel tests. The test unit was excavated in 10cm levels until glacial till was reached throughout the entire unit floor. The test unit contained a total of 24 artifacts recovered from levels two, three, four and five, 10-50cmbd. No subsurface features were identified at the site. Soil thickness varied from 0-90cm across the site. The southwest and northeast portions of the site have sustained considerable wind erosion as well as road, vehicle and various amounts of military disturbance. As a result, soil deposition at these portions of the site averages only 15cm in depth. Soil in these deflated areas consists of loosely compacted, dark brown, organically rich loess to an average depth of 4cm. Below this organic horizon, the soil consists of moderately compacted yellow brown loess with a low density of gravels and cobbles. Glacial till is encountered below this loess deposit and consists of moderately compacted yellow brown sandy loess with a high density of gravels and cobbles.

The area of the site located between the datum and sub-datum shows the most deposition and the least amount of disturbance. The soil in this portion of the site averages 45cm in depth and consists of loosely compacted, dark brown, organically rich loess to an average depth of 7cm. Below this organic horizon, the soil consists of moderately compacted yellow brown loess with a low density of gravels and cobbles. Glacial till is encountered below this loess deposit and consists of moderately compacted yellow brown loess with a high density of gravels and cobbles.

Table 8. Lithic assemblage recorded from XMH-01171

Artifact Class	Frequency	% of Assemblages
Bifaces		
Biface fragments	10	<4%
Unifaces		
End scrapers (1 of glass)	2	<1%
Uniface, flake tool	1	<1%
Burins		
Possible burin spall	1	<1%
Microblade Cores and Microblades		
Microblades	1	<1%
Flake Cores	2	<1%
Debitage		
Flakes (100+ of glass)	250+	>93%
Shatter	2	<1%
Total	269+	100%

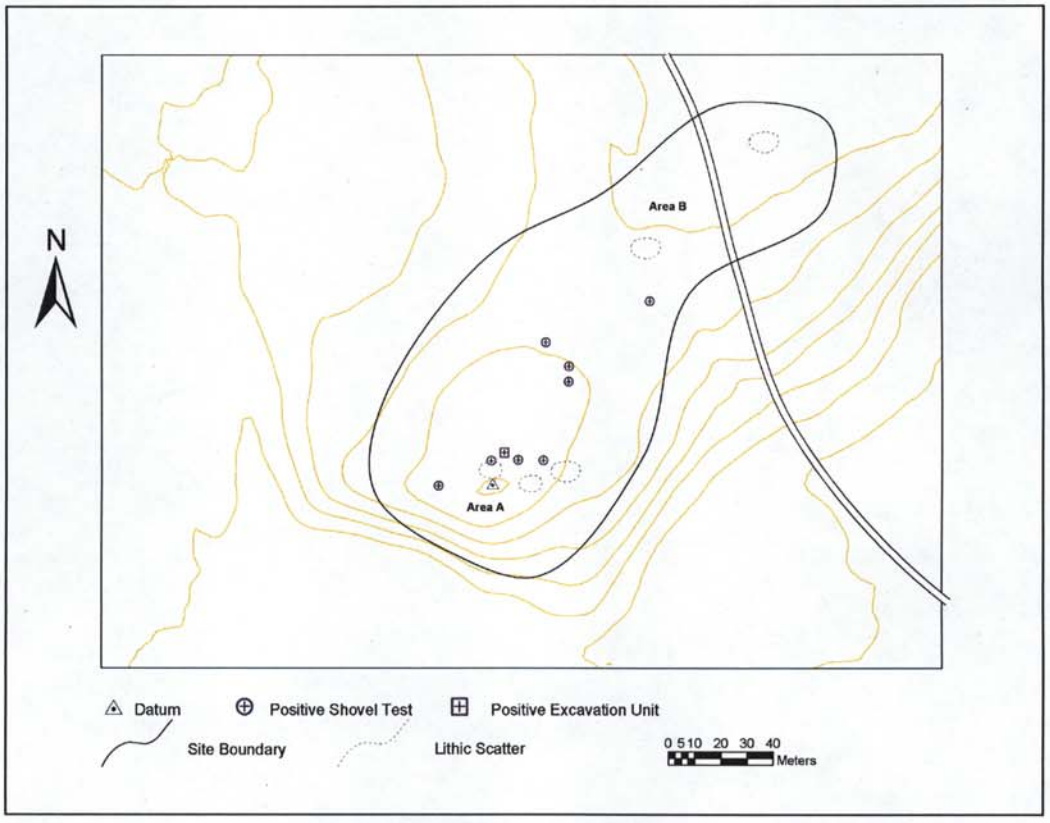

Figure 82. Site map of XMH-01171

Findings

More than 250 artifacts were recorded at XMH-01171, 17 of which are tools. Thirty-three artifacts were found below the surface either in positive shovel tests or in the test unit. Materials at the site include chert, basalt, rhyolite, quartzite, glass and obsidian (a non-locally occurring material type). Based on the results of the survey and testing, the site area is estimated at approximately 100m x 100m.

Site XMH-01171 is a high-density site with both surface and subsurface components. With buried cultural material and multiple tool types, including possible contact period artifacts, XMH-01171 is in an excellent position to contribute to our knowledge of prehistoric land use patterns. In situ artifacts and soil stratigraphy indicate datable material and diagnostic artifacts may be present and could be used to date human use of the site, potentially contributing to a broader regional context. Site XMH-01171 is an intact archaeological site with integrity. The site is eligible for inclusion in the National Register of Historic Places under criterion D, for its potential to yield information important in understanding the prehistory of the region.

XMH-01172
Latitude:
Longitude:
Determination: Not Eligible

Figure 83. General view of XMH-01172, facing north

Site XMH-01172 is located on a very low terrace overlooking a boggy, muskeg area to the east. The closest water to the site is . The site is located in an area that has been mechanically cleared and as a result the view shed is a full 360°. However, the site is at such a low elevation that not much is visible. The Granite Mountains can be seen to the southeast and Muskeg Hill is visible to the east. There is little or no vegetation and approximately 95 percent surface visibility at the site. The road to runs through the site and the surface has been heavily disturbed by the construction of the road, vehicle traffic, and blading . In addition, wind and water erosion, exacerbated by the lack of vegetation, has taken a toll on the site. UTM coordinates for the site are: .

Site XMH-01172 consists of 82 artifacts recorded from the site. Thirty-three flakes were discovered on the exposed surface and two artifact concentrations were identified. Concentration one is located east of the road and contained 13 chert and basalt flakes. Concentration two is west of the road and contained 14 dark gray chert tertiary flakes, many of which were very small (less than ¼in.). Two flakes with worked edges were collected. Twenty-seven of the surface flakes were dark gray chert; the remaining 6 flakes were basalt, banded chert and brown chert.

Shovel tests were systematically placed throughout the site area at intervals of 10m. A total of 23 shovel tests were excavated, three of which contained cultural material. The depth of shovel tests varied, but all were excavated to glacial till. The three positive shovel tests contained one flake each. Shovel test depths ranged from 0-30cm, with loess on top of the till. Based on the results of survey and testing, the site area is estimated at approximately 20m x 40m.

One 1m x 1m test unit was excavated at site XMH-01172. The unit was placed to the south of the site datum, next to a positive shovel test and surface concentration one. The area had a small amount of vegetation protecting it and appeared to have a greater deposition of soil. The test unit was excavated in 10cm levels until glacial till was

reached throughout the entire unit floor. The test unit contained a total of 46 artifacts recovered from levels one, two and three, 0-30cmbd. A portion of level two was heavily disturbed. The majority of artifacts came from 15-25cmbd (levels two and three) and from the SE corner in intact loess. Fourteen flakes were plotted in-situ from 20-26cmbd. All the artifacts from the test unit were dark gray chert tertiary flakes and many were very small (less than ¼in.). Ninety percent or more of the artifacts at this site were dark gray chert. No subsurface features were identified at the site. The unit was excavated to glacial till.

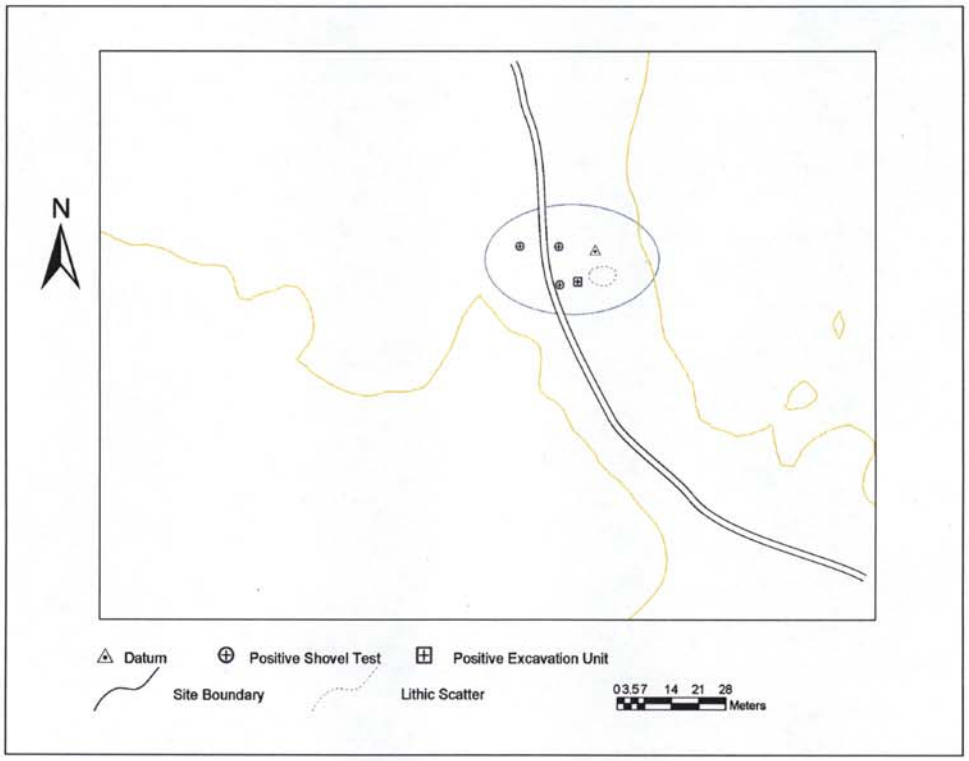

Figure 84. Site map of XMH-01172

Findings

Pedestrian survey and 23 shovel tests produced a total of 82 artifacts. Most of these artifacts were found on a heavily disturbed surface. Despite the large amount of cultural material, loss of integrity at XMH-01172 is indicated by heavy site disturbance caused by the construction of the road and parking area, vehicle traffic and wind and water erosion. As a result, site XMH-01172 does not contain additional information that is important to our understanding of the prehistory or history of the region and is not eligible for inclusion in the National Register of Historic Places.

Results

Only one archaeological site (XMH-01172) was located within the boundaries of the APE for the proposed road upgrades on 12 Mile Crossing Trail. A site evaluation determined that XMH-01172 does not contain enough information that is important to our understanding of the region's prehistory or history and is not eligible for inclusion in the National Register of Historic Places.

While site XMH-01171 does not fall into the APE for this project, its close proximity may expose it to secondary impacts from the road construction. To protect the site from any

inadvertent damage during construction and any subsequent military training,

The DTA archaeologist will be on site and will monitor the construction for this project.

All other previously recorded archaeological sites or historic properties fall outside the proposed project area. Subsequently, the proposed project will have no effect on historic properties.